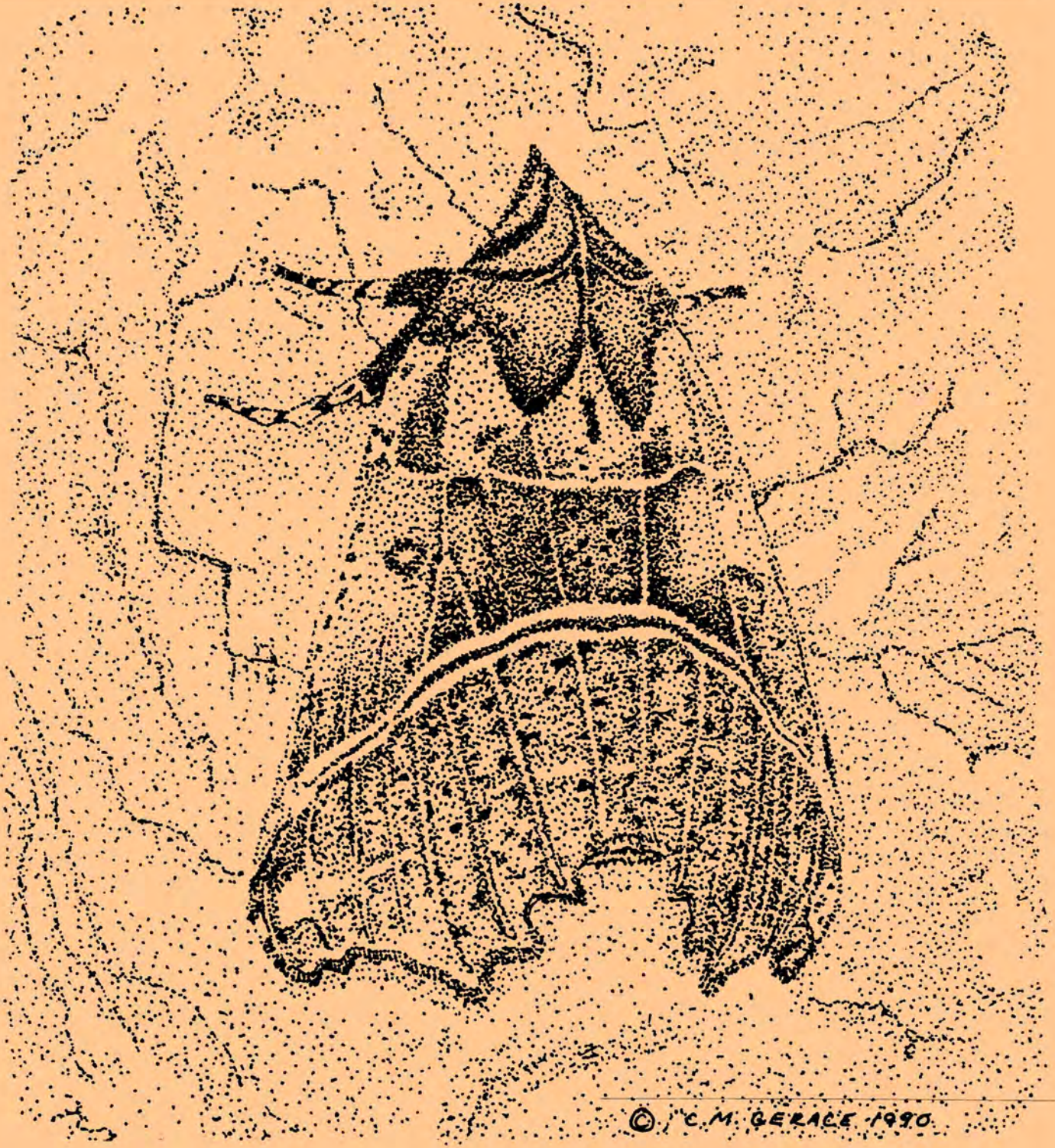

IKC Update

NUMBER 39

DECEMBER 1995



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INDIANA KARST CONSERVANCY

INDIANA KARST CONSERVANCY, INC.

PO Box 2401, Indianapolis, IN 46206-2401

Affiliated with the National Speleological Society.



The Indiana Karst Conservancy, Inc. is a non-profit organization dedicated to the conservation and preservation of caves and karst features in Indiana and other areas of the world. The Conservancy encourages research and promotes education related to karst and its proper, environmentally compatible use.

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Director	Dave Haun	(1997)	(317)	464-9090(W)	/(317)	781-1996(H)
Director	Hank Huffman	...	(1996)	(317)	232-4052(W)	/(812)	876-9645(H)
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* * * * * COMMITTEES/CHAIRPERSON * * * * *

Cave Management & Landowner Relations/	Keith Dunlap	(317)	882-5420
Land Acquisition/	Hank Huffman	.....	(812)	876-9645
Membership/	James Adams	.....	(317)	263-1611
Publications/	Keith Dunlap	.....	(317)	882-5420
Hoosier Forests Project/	Kevin Komisarck	.....	(812)	339-2394

* * * * * MANAGED CAVES/PATRONS * * * * *

Coon Cave/	Keith Dunlap	.....	(317)	882-5420
Grotto Cave/	Keith Dunlap	.....	(317)	882-5420
Shaft Cave/	Jeff Cody	.....	(317)	888-9898
Shiloh Cave/	James Adams	.....	(317)	263-1611
Suicide Cave/	Ronnie Burns	.....	(812)	883-6252
Wayne's Cave/	Serena Smith	.....	(812)	339-2394
Woodard Cave (TN)/	NIG - contact Leslie Cunningham	.....	(219)	327-3259

* * * * * GROTTOS/LIAISONS * * * * *

Bloomington Indiana Grotto/	Anmar Mirza	.....	(812)	339-1506
Bloomington Indiana Grotto/	Serena Smith	.....	(812)	339-2394
Central Indiana Grotto/	Keith Dunlap	.....	(317)	882-5420
Dayton Underground Grotto/	Mike Hood	.....	(513)	252-2978
Eastern Indiana Grotto/	Brian Leavell	.....	(317)	552-7619
Evansville Metropolitan Grotto/	Ernie Payne	.....	(812)	477-7043
Harrison-Crawford Grotto/	Dave Black	.....	(812)	951-3886
Louisville Grotto/	Richard Newton	.....	(812)	365-2495
Mid-Hoosier Grotto/	Jeff Cody	.....	(317)	888-9898
Northern Indiana Grotto/	Leslie Cunningham	.....	(219)	327-3259
Windy City Grotto/	Gary Gibula	.....	(708)	778-6747

Cover - Herald Moth (*Scoliopteryx libatrix*)
by Indiana pen and ink artist Christine Gerace.



Publishing courtesy of *Myotis Press*, Editor and Publisher Keith Dunlap.

QUARTERLY MEETING REMINDER

SATURDAY, DECEMBER 2nd, 7:00 PM

BLOOMINGTON, INDIANA

IU GEOLOGY BUILDING, ROOM 143

(SAME ROOM AS BIG MEETING)

The quarterly meetings are for members and other interested persons to have an open forum for talking about cave and karst conservation and related topics. Past, present, and future IKC projects are discussed to solicit comments and input from our members and the caving community as a whole. The meetings are informal, and everyone is encouraged to attend and participate.

Preliminary Agenda Items: brief recaps of last quarter's activities; Wayne's Cave restoration trip; Shiloh Cave pipe problem update; Mayfield's Cave/Industrial Park status; Jefferson Proving Ground status; Special Publications Committee report; NCMS synopsis; IDNR Cave Management Plan status; IDNR activities; HNF activities; By-law changes discussion; Salamander problem; Cave-for-pay discussion; and more...

Meeting directions: The Geology Building is located at 10th and Walnut Grove. Tenth Street runs east/west and is one of the major streets that cut across the IU Campus. Park behind the building, parking permits are not enforced at night. Enter the building from the rear at the west end. The room is halfway down the hall on the right.

EVENTS CALENDAR

- 02 DEC = IKC QUARTERLY MEETING, Bloomington (see above)
- 10 DEC = IKC/CIG WAYNE'S CAVE RESTORATION TRIP (see page 9)
- ?? FEB = IKC EXECUTIVE BOARD MEETING (location TBD)
- ?? MAR = IKC ANNUAL BUSINESS MEETING, Indianapolis

Editor's comment: You will notice that this issue is a little thinner than usual. There are four primary reasons for this: 1) The National Cave Management Symposium diverted much of our attention over the last several months so other projects were effectively put on hold, 2) The September meeting was later in the month than usual while the December meeting is earlier, so there is really only about two months worth of activity to report rather than the usual three, 3) The September *IKC Update* contained seven pages with photographs which is significantly more expensive to reproduce while the upcoming March issue is traditionally large, so the editor is being frugal on this issue to not over-spend the newsletter's budget (I had several good exchange newsletter articles and newspaper clippings I decided to not run to hold down costs), and 4) The editor also publishes the *CIG Newsletter* and it's larger than usual December issue happen to hit on the same weekend the *Update* is being produced.

Membership to the Indiana Karst Conservancy is open to anyone interested in cave and karst conservation. Annual dues are \$15. Please see inside back cover for the membership application form or to make a donation.

The *IKC Update*, distributed for free, is published quarterly for members and other interested parties. The purpose of this newsletter is to keep the membership and caving community informed of IKC activities and other news related to cave/karst conservation. Submission of original or reprinted articles for publication is encouraged.

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RAMBLINGS FROM THE PRESIDENT...

The IKC has just completed perhaps the biggest project we have ever undertaken -- hosting the 1995 National Cave Management Symposium. Although the other sponsoring organizations pitched in a lot of money, the in-kind labor donated by the IKC prior to and during the event showcased how a grassroots effort by concerned people is what really makes things happen in the world today.

All week I received nothing but positive feedback from the attendees -- on the facilities, the planning, the quality of the papers, the field trips, and just keeping the presentations on schedule. There remains quite a bit of work to do in getting the Proceedings published, but the lion's share is behind us now. Those of you who donated your energy, your vacation time -- and your finances -- towards making this event such a success should be very proud of this accomplishment.

In particular, special thanks go to Keith Dunlap for chairing the Organizing Committee. It was largely his planning and attention to detail that made things go so smoothly during the course of the week... although on more than one occasion I had to reassure him that things were indeed under control. <smile> Good job, Keith!

This event went a long way towards

showing other organizations what we are capable of. It enabled us to strengthen our bonds with other organizations who are in the "business" of karst management -- both in the public and private sector, in-state and out-of-state.

With the that most behind us, we now must turn to other issues that perhaps did not receive their due while we focussed on the symposium. Although it is human nature to allow a let-down, to take a breather -- we have too many irons in the fire to allow ourselves that luxury for long. There remain concerns with Binkley's Cave, Mayfield's Cave, and an issue with a possible cave-for-pay operation in Bloomington. We still need to write a Memorandum of Understanding for the Indiana Cave Survey and The Nature Conservancy, and another with Spring Mill State Park. We need to pick up where we left off with the Land Acquisition initiative. We must continue our participation with the Indiana DNR cave management policies. We need to follow up on landowner relations with a couple of caves in Lawrence County. The list goes on and on.

In short, the IKC is back to "business as usual." Whatever that means.

- Bruce Bowman

Director Tom Sollman, President Bruce Bowman, and member Nick Noe relaxing prior to the start of the September IKC meeting/cookout.

photo by Bill Tozer



NEWS BRIEFS...

- ❑ Due to the lack of a quorum at the September meeting, the proposed bylaw changes were tabled until the December meeting. The formal proposals drafted by Keith Dunlap consist of four motions as follows: 1) authorizing proxies, 2) E-board attendance guidelines, 3) empowering the membership to vote on bylaw changes, and 4) miscellaneous technical items. Additional proposals may be made from the floor. The bylaws were last revised five years ago and can be found in the March 1991 *IKC Update*.
- ❑ The IKC has received two book donations to be auctioned off. The first book, *Trapped!*, is the story of Floyd Collins. The hard cover book is signed by its author, Roger Brucker and was donated by Kent Wilson. The second book is a copy of the just published Proceedings of the 1993 National Cave Management Symposium, donated by Bruce Bowman. You may make a silent auction bid on either of these books between now and December 31 by calling Bruce Bowman (317) 539-6935. All money will go to the IKC general fund.
- ❑ As reported in the September *IKC Update*, a pipe was drilled into the main passage of Shiloh Cave approximately 500 feet from the Church Entrance. The 4" PVC pipe was to serve as a drain for a large sinkhole in the front yard of the landowner's property. Water quality samples were taken from the cave and found to have a relatively high *E. Coli* count, but it was inconclusive if the detected bacteria was coming from the owner's septic system or just surface runoff. In late October the IKC made arrangements with the Lawrence County Health Department to dye-trace the septic system in question, but the home owner has not been cooperative in getting this carried out. Furthermore, the EPA has jurisdiction on this type of "injection wells" and may order the landowner to seal the pipe if it is determined to be effecting the cave's water quality or eco-system.
- ❑ Over at the Culvert Entrance to Donnehue, it was reported that a black liquid was going into the cave. Investigation by the Water Management group of IDEM found that a service bay drain from the nearby Hubler car dealership had not been connected to the city sewer when the building was constructed a number of years ago and was draining to the culvert. Corrective action is to be taken.
- ❑ The issue of "cave-for-pay" in Indiana has again surfaced with at least one full-time outfitter from Chicago sending out formal flyers and recruiting non-caving adventurers to go horizontal and vertical "wild" caving in southern Indiana (trips start at \$120). Flyers from a different promoter have also been seen on the IU campus offering trips to Buckner and Small Dull caves for \$12 each. While there are numerous ethical issues related to cave-for-pay, the item of most concern to the IKC deals with private landowners who may or may not have knowledge of these for-profit trips taking place on their property and may or may not understand the liabilities associated with trip where money was paid. For the record, the IKC *strictly forbids* any cave-for-pay trips on IKC managed properties.
- ❑ After several years of reduced illegal foot traffic across the Hancock Property (along Spicer Lane) to Salamander Cave, it would now appear unauthorized traffic is once again on the rise. The homeowner across from the traditional parking area has communicated to Mr Hancock his observation of more trespassers and the arrogance of those who he has stopped and questioned. Compounding the problem is a resurgence in the purchase of, and/or illicit reproduction of Love's 1972 *Spelunker's Guide of Garrison Chapel* which states visitors should *not* ask permission. This may have been true twenty years ago, but certainly isn't true today. In order to maintain a good working relationship with Mr Hancock, the IKC *must* get this illegal traffic to Salamander stopped, even if it means weekend "babysitters" and having trespassers arrested and their vehicles towed.



- ❑ To better manage and protect Suicide Cave in Washington County, Ronnie Burns of nearby Salem will be the new patron (previously Bruce Bowman served as the patron). Because of the limit of twelve trips per year, all IKC trips must be arranged through Ronnie. If you would like to find out more about this cave, contact Ronnie at (812) 883-6252 or rburns1015@aol.com.
- ❑ The Land Acquisition initiative is beginning to pick up momentum again. In a previous *IKC Update*, it was noted that the IKC has established a cooperative venture with The Nature Conservancy in conjunction with their Blue River Project. In September, representatives of The Nature Conservancy contacted the IKC regarding the possible availability of the karst-related property that is a primary feed for the largest rise pool in the state -- Harrison Spring. The three IKC officers visited the site the following weekend and earmarked it as a property with a good deal of acquisition potential.

Unfortunately the entire tract was several hundred acres and the owner did not want to sub-divide the small piece of interest to the IKC/TNC, so the property was sold to a developer instead. Although all avenues have not yet been exhausted, it would appear that neither the IKC nor TNC will end up with this nice resource. The IKC will continue to work hand-in-hand with The Nature Conservancy to identify other properties that would benefit from the stewardship of either organization.

- ❑ On August 25th, Julian Lewis, Hank Huffman, and Tom Sollman conducted a biological survey of Mayfield's Cave in Monroe County. The eight hour visit was to document the current status to serve as a baseline to evaluate any impacts that might be caused by nearby industrial construction (see related article on page 8). Mayfield's is best known for the significant biological work done by Banta in 1907, thought to be one of the most thorough cave fauna studies to have been performed at that time. Horton Hobbs in the 70s and Jim Keith in the early 80s have also provided snapshots of this cave's biota.

The most recent survey found a relatively stable eco-system with most of the usual cave fauna. The stream was much lower than anticipated, but otherwise, things seem to be in good shape. Visitation to the cave is highly restricted by the long time landowner, thus modern vandalism is minimal which has preserved the numerous pre-1900 dates and signatures in this cave.

- ❑ On November 8th, Keith Dunlap attended a public hearing in Madison on the Final Environmental Impact Statement (FEIS) for the reuse plan of the Jefferson Proving Ground (JPG) in southeast Indiana. The meeting consisted of a brief introduction followed by comments on the FEIS by approximately a dozen people, representing various organizations. The consensus was clear, the FEIS was totally inadequate and did not even begin to meet the NEPA regulations. The most concerning aspect of the FEIS was that it completely failed to specifically address any of the comments submitted during the comment period for the Draft EIS (published last spring). Most of those comments dealt with the lack of required specifics directed toward the reuse alternatives. Both the EPA and the Indiana Department of Environmental Management (IDEM) were very critical that the Department of Defense's FEIS conclusions were based upon data presented in the DEIS which the EPA/IDEM did not concur with. This had been formally communicated this to DoD when the DEIS was published. The IKC had submitted two pages of comments on the DEIS related caves, reuse impacts, and biological significance. The FEIS did not formally address any of our comments other than adding a general statement that it is known that caves exist on the property (which was not acknowledged in the DEIS). It is likely the DoD will formally sign the unrevised FEIS on or after November 20th with or without the EPA's concurrence. The only alternatives to force the DoD to revise the EIS are an appeal to the Environmental Quality Council (a special committee formed by the Executive Branch to hear environmental disputes between federal agencies) or a civil (citizens) lawsuit in federal court disputing violations of the NEPA regulations.



As for the future of the JPG? It would appear that none of the proposed alternatives (including the USFWS National Wildlife Refuge) north of the firing line will occur. The DoD is insisting on transferring all liability and clean-up responsibilities to whoever takes the land. Since the potential clean-up costs have been estimated as high as \$8.6 billion, no person or agency in their right mind would accept ownership of this 50,000 acre tract (that's \$160,000 per acre!). The solution would seem clear, have the DoD retain ownership and liability, but have the USFWS manage the property. This solution would minimize the need for any cleanup beyond a few special areas and yet provide some economic value and employment to the community. However, the DoD wants it all or nothing, and would prefer to let the property go unmanaged if it can't unload the property and its responsibilities completely.

- While spring is a long way off, Bob Armstrong of the Lost River Conservation Association has already set the dates for his 1996 Lost River Tours. The five Saturday dates are April 13th, May 11th, June 22nd, September 7th, and October 12th. All trips leave at 8 AM from the southeast corner of the square in Orleans. For more information, call Bob at (317) 926-4266.
- In this era of decreasing federal spending, the proposed I-69 extension (Indy-Evansville Highway) just won't go away. Expanded into "Corridor 18", stretching from Indianapolis to Houston, this 1,020 mile project is being touted as the NAFTA highway to connect Canada with Mexico. Citing the projects latest total cost figures of \$5.5 billion, the cost/benefit ratio is just barely above unity. It is interesting to note that other groups studying just the Indiana section (approximately 80 miles of new road and 60 miles of upgraded SR 37) peg the cost for that section alone at \$2 to 3 billion. Something doesn't add up and who ends up paying for all of it in the end?
- In late October, Governor Bayh with the assistance of his Director of the Department of Natural Resources, Pat Ralston, implemented a reorganization of the IDNR which further cut staff areas in this already strapped agency. With the State running a \$1.3 billion surplus, recreational use of Indiana's public resources at an all time high, and much of the IDNR funding coming from non-tax sources (hunting and fishing licenses, environmental plates, tax check-offs, timber sales, etc), it is absolutely obscene to be gutting an agency just to play one-upmanship on the downsizing bandwagon in a misguided attempt to position himself for a US Senate run after he leaves the Governor's office.
- Due to efforts absorbed by the National Cave Management Symposium, the publication of the IKC's Special Reprint #7 on Old Town Spring by Marion Fidlar did not get completed in time to be mailed with this newsletter. The reprint will be sent with February meeting/renewal notice or with the March *IKC Update*.
- The 3rd annual IKC Brownie Contest at the September meeting/cook-out had a record number of seven entries with 1st, 2nd, and 3rd places going to Patty Sollman, Bambi Erwin, and Linda Bundy, respectively.
- While IKC dues do not expire until the end of March, members can renew early or make other donations before the end of the year. The IKC is a 501(c)(3) tax-exempt organization with dues and donations fully tax deductible if you itemize on your federal return.
- Five new members have joined the IKC since September. Welcome individual members Ronnie Burns, Carl Nelson, and Richard Orr, along with organizational members Bluespring Caverns and The Nature Conservancy of Indiana. Our current membership now stands at 147. Generous donations were received also from Jeff Farr and Bluespring Caverns. Thanks for your support.

MAYFIELD'S CAVE STATUS REPORT

by Bruce Bowman and Bill Baus

The IKC continues to evaluate the situation for Mayfield's Cave near Bloomington. You may recall from past articles that this cave and its associated drainage area may be compromised by a planned industrial park in the area west of the SR37 bypass. Mayfield's Cave is of special significance due to the large amount of historic artwork within and due to a classic biological inventory conducted by Banta near the turn of the century.

The industrial park appeared from the outset to be a well-organized and well-financed operation, and to this day it seems unlikely that the IKC and other affiliated organizations will be able to thwart the development entirely. Nonetheless, the IKC and Protect Our Woods each contributed \$200 to retain an attorney, Bill Baus, and one private donation of \$100 was also received. Just prior to the publication of the September *IKC Update*, we reached the deadline for filing suit via the certiorari procedure which is the normal procedure used in Indiana for court challenges to most zoning decisions. While there were some procedural irregularities, they were not of the type that made the zoning decisions clearly illegal, and they could have been corrected fairly easily with the end result being only a delay. Furthermore, only one neighbor had made a firm commitment, and funds collected would not be sufficient to cover the anticipated legal expenses. Therefore the deadline was allowed to pass without a challenge.

Even though the certiorari procedure is no longer available, there are still some legal remedies which can be pursued. Our efforts have made it clear that we are watching the developers, but we are currently attempting to establish a rapport with them so that the development is made with an eye for mitigation of the potential damages, with a particular focus on erosion control during the actual construction. It is clearly too early to take on an adversarial posture, and our attorney has already met with the developers with a modicum of success. Below is a summary of that meeting from the developer's perspective:

- 1) The site is a prime site for this development because of its access to SR 37 (and the I-69 extension if it ever happens); because it was already targeted for industrial use by the city master plan and the proposed county master plan; and because of the perceived need for additional industrial land in the area.
- 2) They have exceeded all county regulations for surface water control and ground water contamination.
- 3) The safeguards that they are putting in place are better than what would probably occur if the area were used for residential development, and it is unrealistic to assume that no development at all would occur.
- 4) The surface run-off from the developed area will not be directed into the sink-holes.
- 5) The "biofilters" and holding ponds will actually result in less impact downstream from storm run off than is currently the case.
- 6) The intensely karst portion of the area will be left undeveloped.
- 7) The allegations about past improper disposal by Hall Signs are irrelevant: The company already is in the area and thus would not be a "new" source of potential contamination, and monitoring improper disposal is the job of the EPA & IDEM, not local zoning authorities. Furthermore, the new buyer for the present Hall Signs site has had it tested and no illegal residues have been found, which gives credence to Hall Signs contentions that they have been following regulations.

The biofilters are artificial ditches with wide bottoms and gentle slopes and are planted with grasses and other vegetation that thrive in wet areas. These ditches channel the water to the holding ponds



slowly so that contaminants can be filtered out and undergo natural degradation before the water enters streams. The holding ponds will be maintained as wetlands and planted with appropriate vegetation. They are designed to release the water from a "100 year flood" rainfall at a "10 year flood" rate. The ditches and ponds also serve to slow the travel of accidental spills so that clean-up can be accomplished before the spill gets into the natural drainage.

The recorded plat for the development shows large portions of several lots devoted to a conservation district in which future development is prohibited. These deed restrictions are enforceable as real covenants. There may be some creative

things that the IKC could do in the near future to ensure that these covenants are enforced. The development, if it goes according to plan, does not appear to have the potential to damage the karst environment as much as was first thought. Mr. Baus has also met with some other specialists who were interested in the project.

A second meeting with the developers is planned soon. Prior to this meeting, Mr. Baus will be coming to the IKC's December meeting to discuss the issues and update the membership on the current status... this will be the first agenda item. This is a prime opportunity to voice your input on this matter. Please come to this meeting and participate.

IKC/CIG WAYNE'S CLEANUP TRIP - DEC 10th

The IKC and the Central Indiana Grotto are once again co-sponsoring the annual cleanup trip into Wayne's Cave on Sunday, December 10th. Our intentions are to have a little fun while performing some much needed conservation/restoration work.

For those unfamiliar with Wayne's Cave, it is Monroe County's second longest with 4.25 miles of mapped passage. Wayne's is notorious for its 1250 foot crawlway connecting Old Wayne's and the rest of the cave. This cave is very demanding and is *not* for the first time caver, but if you are in good physical shape, have been caving enough to know what you are doing, and have the proper equipment (especially a good set of knee pads), this could be the cave for you.

The cleanup effort this year will concentrate on the crawlway and Old Wayne's, but some of the group will probably make a quick trip to Camp II. Haul bags will be provided by the IKC, but only minimal trash still exists because of our past efforts. There will be wire brushes available for graffiti removal, and we will continue to do some selective "mud-washing". We will also direct our efforts on spent carbide collection, the most needed activity left to complete.

If you have not been in Wayne's since the IKC started this restoration project in 1987, you may be pleasantly surprised at the progress. The most encouraging part of expending effort in this cave is that it remains clean due to the regulated access policy the IKC has imposed.

Note: As with any IKC sponsored cave trip, you must have a helmet and three sources of reliable light. If you are new to caving or have not been to Wayne's before, *please* contact Dave Haun prior to the trip.

We will be meeting at the Bloomington westside Hardees (SR 37 & 48) and leaving by 9:15 AM. Because parking is limited at the cave we *must* carpool and will be leaving cars in the K-mart parking lot behind Bob Evans.

NATIONAL CAVE RESCUE COMMISSION TRAINING

by Glenn Kotnik

The rescue of an injured caver is a demanding, tedious, agonizingly slow process which must be carried out with coordination and urgency. This is the impression taken away by the 42 participants in the NCRC Central Region mock rescue held September 30 - October 1 at Henderson Park near Salem, Indiana.

The event was attended by cavers, firemen, medics, and others who wanted to become better prepared to participate in an underground rescue. The program began on Saturday at the Washington County Fair grounds with lectures on rescue logistics, equipment, media interaction, initial response, cave search, communications, medical considerations, hypothermia, patient "packaging", and evacuation. The day ended above ground at Henderson Park, an area containing three caves: Waterfall, Middle, and Mill Caves. This was a "mock" of the following day's mock rescue. Participants maneuvered immobilized volunteer patients through a roped off obstacle course over the dry stream bed and through forested areas. Techniques were taught for moving a patient on a litter through low, tight, twisting, rocky, wet, and crevassed passages. These techniques included "turtling" in which the patient is balanced on the backs of "turtles" or rescuers crawling on their hands and knees in stream passages, narrow solution channels, or mud.

The mock rescue began Sunday morning. The scenario enacted was a realistic one: rescue trainees were told only that a party of cavers was reported missing in one of the three caves in Henderson park. Search teams searched all three caves and

finally two injured cavers were found in Mill Cave. One caver was only slightly injured and was able to walk out with some assistance from rescuers. The other caver was unable to walk due to a back injury and was found about 2000 feet inside the cave in the breakdown room just past the notorious Gun Barrel passage. The initial response team reported on the patient's situation and condition and a communication team unrolled hundreds of yards of phone cable. A phone station was established at the beginning of the Gun Barrel crawlway but a mysterious break occurred in the phone line. Another team was dispatched to find and repair the discontinuity in the wire. The patient required immobilization on a plastic "skid" because of her back injury. Several evacuation teams of five to ten rescuers each were formed to relay the injured caver out. The initial transport through the Gun Barrel, then the next narrow stream passage and a tight crawlway took over four hours. Rescuers became fatigued and discouraged after this long period of laboring or waiting in watery passages. After the first few hundred feet of narrow passage had been navigated, the large, dry upper level passage was a breeze, and optimism returned to the rescue team. The evacuee was easily carried down the walking passage, then passed over the laps of rescuers who sat straddling crevasses. A rope was rigged to belay the litter from the upper passage to the lower stream level. The final walking stream passage was easily navigated. The mock rescue ended seven hours after it had started, with the clean-up work still to be done.

IKC EXECUTIVE BOARD NOMINATIONS

As the end of the year approaches, it is time to start thinking about the upcoming March elections. The three officer (President, Secretary, and Treasurer) and six of the twelve Director positions are up for a vote. All members are eligible, with the only requirements being the willingness to be involved and to attend the five meetings each year (the four Quarterly meetings plus the February Board meeting). Officer positions are single year terms while the Director terms are two years in duration. Contact Bruce Bowman for more information, to nominate yourself, or to suggest other IKC members who might be interested.

DISTRIBUTION AND STATUS OF THE NORTHERN CAVEFISH

summarized by Keith Dunlap

In 1992, the Indiana Department of Transportation dug into a sinkhole along SR 37 and uncovered three Northern cavefish (*Amblyopsis spelaea*). This opened a can of worms for InDOT, but more importantly, it raised a number of significant questions related to the cavefish for which no one seem to have the answers. How endangered are the cavefish? How does their current population compare to one hundred years ago? What are their current population and distribution? Would having the cavefish list as a federal endangered species provide any greater protection? Can active management of the species lead to a recovery and increased population numbers?

In 1993, the Indiana Department of Natural Resource Nongame Section set out to find some of the answers to the above questions. They contracted with Dr William Pearson and grad-student Charles Boston of the University of Louisville for a two year research project to determine the distribution and status of the Northern cavefish. In March of this year, Pearson/Boston published their finding in a report to the IDNR. The following is a brief synopsis of that report:

- o The known distribution of the Northern cavefish is just 123 miles long by 24 miles wide, spanning five counties each in Indiana and Kentucky. The southern most location is Mammoth Cave National Park, while the northern most location is Bluespring Caverns.
- o Approximately 114 site (caves, springs, or wells) in Indiana and Kentucky have been documented since the late 1800s. Some of these are questionable locations, or the sites have been destroyed or are otherwise unaccessible now.
- o There are 65 reliable cave locations that have been documented in the two states since 1989.
- o Most of these locations have very few cavefish. However, four locations are considered population centers (Mam-

moth Cave NP, Breckinridge County, Spring Mill State Park, and Bluespring Caverns).

- o Using a mark and recapture technique, it was determined that a careful single pass survey would find only slightly more than one half of the actual cavefish living in the stream.
- o Using numerous approximations, Pearson predicted there were 5,600 cavefish located in the known sites. Using the assumption that there are 10 times as many cave passage unknown as known, the estimated number of cavefish could be as high as 56,000.
- o Using historic descriptions, it is thought that the population of cavefish has not substantially decreased over the past 100 years. Furthermore, the geographical distribution does not appear to have changed much in that time.
- o Several historic sites which appear to no longer have cavefish may have been over-collected, over-visited, or the cavefish may have been eliminated by other species of surface fish that are now living in the cave.

Most of the field work by Pearson and Boston was done in Kentucky (72 site visits) rather than Indiana (34 site visits). This was primarily because Dave Black via the Indiana Cave Survey had already compiled and documented most of the sites in Indiana, while very few of the Kentucky sites had been clearly documented prior to the beginning of this project.

It is anticipated that some follow-on work will need to be done and possibly periodic surveys will be conducted to further define and monitor the status of the Northern cavefish. In the mean time, it appears the status of the fish is better than previously anticipated.

Note: Any siting of cavefish in Indiana should be reported to Dave Black so it can be added to his database.

NATIONAL CAVE MANAGEMENT SYMPOSIUM - A SUCCESS!

by Keith Dunlap

Last month, several years of hard work culminated in a very successful symposium dealing with cave conservation, protection, and management. One hundred and sixty attendees participated from thirty-three states, plus Canada, Barbados, Australia, and the Philippines. Participants represented federal agencies (US Fish & Wildlife, US Forest Service, National Park Service, Bureau of Land Management, National Resource Conservation Service), state agencies (various fish & wildlife departments, heritage programs, water quality divisions), private conservation organizations (IKC, Michigan Karst Conservancy, Missouri Cave & Karst Conservancy, Southeastern Cave Conservancy, The Nature Conservancy, NSS, American Cave Conservation Association), environmental consulting firms (EarthTech, 3D/Environmental), universities, commercial caves, and private caves.

The site of the symposium was Spring Mill Inn in Spring Mill State Park. With the park setting the perfect background, the weather being very cooperative, and no major schedule or facility snags, it was truly a pleasure to host this important event.

The symposium started on Tuesday, October 24th with several pre-symposium field trips, the most popular being the cave entrance hike within the park. Wednesday morning brought the opening speeches and three plenary presentations. After lunch, two concurrent sessions presented a total of fourteen papers. Wednesday evening's activities included the Twin Cave boat trip and a reception/social that lasted until after mid-night.

Thursday was dedicated to field trips using three tour buses. Two buses (running different routes) visited Wyandotte Cave, Marengo Cave, and Big Spring Nature Preserve. The other bus saw features of the Lost River, Dillon Cave, Orangeville Rise, Wesley Chapel Gulf, and Gory Hole. Presenters at the various stops included Roger Gleitz, Roy Powers, Virgil Brack, Jeff Cummings, Scott Johnson, Jerry Lewis, Gordon Smith, Gary Roberson, Hank Huffman, Bob Armstrong, Larry Mullins, Horton Hobbs, and Ron Richards. The field trips covered a lot of ground and ma-

terial, and allowed Indiana to highlight some of our cave and karst management activities.

Friday saw twenty-six additional papers presented in two concurrent sessions. The day ended with a formal banquet at the Inn and a wonderful presentation by Horton Hobbs.

Saturday morning saw twelve more concurrent papers and closed with a special presentation by Jackie Bellwood of the Cincinnati Museum of Natural History on their cave and bat projects. Saturday afternoon were optional field trips including cave trips to the new section of Marengo and Sullivan caves, and a biology field trip into Bronson Cave.

The symposium did not happen without a lot of help and cooperation. First there were the four host organizations: the Hoosier National Forest, The Indiana DNR (Divisions of Nature Preserves, State Parks, Forestry, and Fish & Wildlife), US Fish & Wildlife - Bloomington Office, and the IKC. Each contributed in their own way to help organize, pull strings, or provide monetary backing. Then there were the co-sponsors: 3D/Environmental, ACCA, Bluespring Caverns, Marengo Cave, Central Indiana Grotto, Michigan Karst Conservancy, National Cave Association, NSS, National Outdoor Leadership School, and The Nature Conservancy of Indiana. Each of these organizations chipped in extra money to cover some of the overhead expenses that keep the registration fee affordable. The third group to credit for the symposium's success were the various presenters. Forty-two volunteers presented over fifty papers. The final group to acknowledge were those serving on or helping the organizing committee. These include IKC members: Joshua Abdulla, James Adams, Bruce Bowman, Keith Dunlap, Dave Haun, Hank Huffman, Scott Johnson, Larry Mullins, Tom Rea, Gary Roberson, Gordon Smith, and Tom Sollman.

So what was accomplished by hosting this symposium in Indiana? First, every attendee went away a little more knowledgeable and hopefully they will be better equipped to protect the caves and karst



INDIANA KARST CONSERVANCY TREASURY REPORT
Income Statement
From July 01, 1995 to September 30, 1995

INCOME:

Dues Apportionment and Residuals	571.25	
Donations	110.00	
Interest	54.46	
Restricted funds transfer	9.92	
		\$745.63

EXPENSES:

IKC Update (Printing/Production/Mailing):	231.68	
Membership Correspondence/Expenses	39.79	
Misc Correspondence/Info Request/Conservation	27.13	
Property Management Expenses	28.21	
IKC Cookout	33.94	
		(\$360.75)

NET OPERATING EXCESS (DEFICIT) THIS PERIOD \$384.88

Balance Sheet
June 30, 1995

ASSETS:

Cash in Bank	13708.36	
	Total Assets	<u><u>\$13,708.36</u></u>

LIABILITIES & OPERATING EXCESS:

1995 National Cave Management Symposium	7186.22	
Hancock Property Maintenance Fund	205.81	
DNR Non-Game Fund	270.00	
Indiana Cave Symposium Fund	330.82	
Deferred Dues Fund: 144 members - 1995 50%	1080.00	
Previous Operating Excess	4250.63	
Net Excess (Deficit) This Period	384.88	
		4635.51
Current Operating Excess	4635.51	
Total Liabilities & Operating Excess		<u><u>\$13,708.36</u></u>

they are responsible for or have an interest in conserving. On a more local basis, hosting the symposium in Indiana allowed approximately two dozen Indiana DNR and Indiana-based federal employees to attend, along with twenty or so other Indiana folks involved in cave management or protection (in past years, there have only

been a handful of Indiana attendees, most of whom were non-agency people). Finally, hosting the symposium drew attention to Indiana as being a leader in cave management and protection, and as an integral part of that, highlighted the IKC as one of the principal grass-root organizations that is making a difference.

IKC QUARTERLY MEETING MINUTES

Saturday, September 23, 1995

Clayton, Indiana

BOARD MEMBERS PRESENT:

Joshua Abdulla	James Adams
Bruce Bowman	Larry Bundy
Keith Dunlap	Larry Mullins
Tom Rea	Tom Sollman
Bill Tozer	

BOARD MEMBERS ABSENT:

Bruce Devore	Dave Haun
Hank Huffman	Eric Schmidt
Bob Sergesketter	Betty Watson

The meeting was called to order at 5:24 PM by IKC President, Bruce Bowman at the Bowman Ranch in Clayton, Indiana. Introductions were made and the June 1995 meeting minutes were approved as published.

Treasurer Keith Dunlap reported a balance of almost \$14,000. About \$6,000 of this belongs to the IKC and the rest is for the National Cave Management Symposium.

The National Cave Management Symposium will begin on October 23rd at Spring Mill State Park. Fifty-four papers are scheduled for presentation. There will be all-day field trips on Thursday. So far, 105 attendees are registered.

The annual Wayne's Cave clean-up with the Central Indiana Grotto is scheduled for December 10th. Director Dave Haun will lead the trip.

Information concerning the Mayfield's Cave situation was published in the September *IKC Update*. After consultation with the IKC attorney for this matter, Bill Baus, it is felt that further money spent on this project would not be well spent. Director Tom Sollman recently participated in a biology survey of the cave.

The question was raised concerning construction near Binkley's Cave: Should the IKC fund a baseline bacteria count to be used as a future benchmark. Dave Black reports that the cost would be \$10 to \$15 per test. We will consult with Biologist Jerry Lewis.

Director Larry Bundy reported that a Mid-Hoosier Grotto member, Kenny Hedges, has had contact with the Bedford Boat Club which owns one entrance of Doghill-Donnehue Cave. They are concerned with cavers parking nearby and changing clothes. More people are using this entrance since the culvert entrance

has been posted. The suggestion was made that we might want to fund the creation of a parking area and a more discrete changing area. It was felt, however, that this might be more appropriate for one of the Indiana grottos to take on. This would be a good opportunity for cavers to help foster good will with the landowners.

A Landowner Appreciation Day was suggested -- have a big party to say "Thank You" to the landowners. There was some discussion and most members admitted that this would probably not be appropriate.

Director Tom Rea reported on his involvement with the Indiana Department of Natural Resources Cave Management Task Force. Three committees have been formed. The committee as a whole is supposed to meet at the end of September. The state feels a responsibility to "do" something. They want to know who is using state-owned caves. A permit system has been proposed. If a caver wanted to visit a state-owned cave, they would need to fill out some forms, get their equipment verified and obtain a permit good for one visit. If a caver gets three permits and there has been no trouble, then he would get an annual license. This system would be in place at all state parks and could be a good system for cavers.

Bruce gave the membership an update on The Nature Conservancy's Blue River Project. He volunteered to draft a Memorandum of Understanding but suggested that this project might be on hold. It seems that some locals have a mistrust for The Nature Conservancy. There are a lot of misconceptions in the area.

The Memorandum Of Understanding between the IKC and Spring Mill State Park has expired. When the survey was in progress the state needed an organization to take control of the data. Keith Dunlap recommend that the IKC renew the portion of the document that protects the data. Bruce Bowman will coordinate with Steve Collins and meet with the property manager at the park.

Meetings continue to be on held on the Indianapolis to Evansville highway. The issue may die. The September *IKC Update* has more information.

Concerning Buddha Cave: Who owns it? The property may have passed to the children. Bill Tozer will visit. Also, do they want to sell the cave?



Bruce Bowman submitted two requests for Golden Eagle grants. Both were denied.

Keith Dunlap distributed four suggestions for Bylaws revisions. This may be discussed at the December meeting.

A vote on the disposition of the Wayne's Cave vandalism issue was tabled indefinitely.

After one year, the management plans of Suicide Cave and Shiloh Cave were reviewed. No changes were recommended. Ronnie Burns was appointed Patron of Suicide Cave by a 9-0 vote. (President Bruce Bowman later polled Director Eric Schmidt who also was in favor of the motion.)

There have been some disturbing developments at Shiloh Cave. An injection well was found draining into the cave by Tom Sollman. Tom Rea collected water samples which were delivered to the Lawrence County Board of Health for testing. A DNR conservation officer has been assigned to the case. The Environmental Protection Agency has also been involved. They consider this an illegal well and would deny any permits if they were applied for by the landowner above this portion of the cave.

There was also discussion on the possibility of providing a ladder for safer access to Shiloh Cave. Secretary James Adams expressed concern for visitors crossing the narrow ledge and outer dam. The general feeling of the membership was that anything the IKC would do, would also increase our liability.

Director Larry Mullins updated the members

on Hoosier National Forest activities. A Memorandum Of Understanding has been signed with the IKC to provide up to \$2,500 for the National Cave Management Symposium.

Gory Hole needs a fence, however, this will be put on hold until after the Tincher Hollow Special Area draft is signed. Richard Newton will supply the rails for a split rail fence around the pit.

Larry expects that the land exchange with US Gypsum will be finalized before the December IKC meeting. Once the exchange takes place, a management plan will need to be put into place.

A couple of other karst-related projects are also in the works, according to Larry.

Finally, it was noted that the HNF committee needs to be revived.

The next meeting will be on Saturday, December 2nd in Bloomington at 7:00 PM.

The meeting adjourned and members feasted while entries in the annual brownie bake-off were judged. Congratulations to Patty Sollman on her winning entry. Also, thanks to the judges for their help. Second place went to Bambi Erwin and Linda Bundy took third place. A record number of entries were submitted.

Finally, thanks to Bruce and Cissy Bowman for hosting the annual cook out.

Submitted by James Adams, Secretary.

INDIANA KARST CONSERVANCY, PO BOX 2401, INDIANAPOLIS, IN 46206-2401

I would like to help the IKC protect Indiana's unique caves and other karst features. Enclosed is:

\$ _____ for IKC membership dues at \$15 per year (dues expire March 31st of each year, please pro-rate @ \$1.25/month).

\$ _____ donation to the general IKC fund.

\$ _____ donation restricted to a specific IKC project. Please specify: _____

_____ I know of an area worthy of protection. Please contact me.

_____ I would like to volunteer to help. Please contact me.

NAME _____

ADDRESS _____

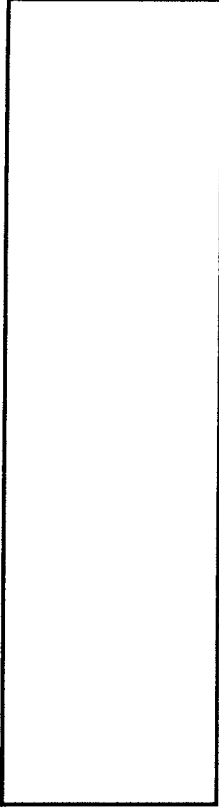
CITY/STATE/ZIP _____

PHONE # _____

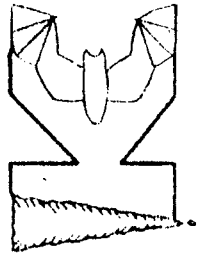
Make checks payable to the Indiana Karst Conservancy, Inc. and mail to the IKC Treasurer, c/o Indiana Karst Conservancy, PO Box 2401, Indianapolis, IN 46206-2401. The IKC is an IRS recognized 501(c)(3) non-profit organization with membership dues and donations fully tax deductible.

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